

**CLAIMS:**

1. A method of placing a sheath in a stable position in or near a desired anatomical structure in a heart chamber having a known nearby anatomical feature, comprising the steps of:
  - inserting the sheath into the heart chamber;
  - positioning the sheath with respect to the nearby anatomical feature;
  - extending a guidewire from the sheath into or near to the nearby anatomical feature;
  - retracting the sheath while the guidewire is extended into or near to the nearby anatomical feature; and
  - moving the sheath to place it in or near the desired anatomical structure.
2. The method of claim 1, wherein the sheath is deflectable.
3. The method of claim 1, wherein the sheath is a fixed-curve and torqueable.
4. The method of claim 1, wherein the desired anatomical structure is the coronary sinus.
5. The method of claim 1, wherein the nearby anatomical feature is the inferior vena cava.
6. The method of claim 1, further comprising imaging the anatomical structure with an imaging catheter contained at least partially within the sheath.
7. The method of claim 1, further comprising the steps of disengaging the guidewire and then further moving the sheath.
8. The method of claim 1, further comprising the step of determining pacing thresholds using pacing electrodes positioned on or near the sheath.
9. The method of claim 8, further comprising the step of introducing a pacing lead into the heart chamber.
10. A method of placing a sheath within a patient's vasculature, comprising:
  - advancing the sheath within the vasculature;
  - recognizing a first anatomical feature;
  - stabilizing the sheath by attaching it to or near the first anatomical feature; and
  - positioning the sheath to locate a second anatomical feature.
11. The method of claim 10, further comprising the steps of disattaching the sheath from first anatomical feature, and further positioning the sheath.
12. The method of claim 10, wherein the sheath is positioned at least in part in connection with imaging means on or within sheath.



- 1 13. The method of claim 10, further comprising the step of determining pacing thresholds.
- 2 14. Medical apparatus for placement in a stable position in or near a desired anatomical
- 3 structure with a patient's vasculature comprising:
- 4 a sheath for inserting into a patient's vasculature, the sheath having a port near
- 5 a distal end of the sheath;
- 6 a guidewire at least partially contained within the sheath, the guidewire being
- 7 capable of being extended through the port and attaching to the vasculature;
- 8 and
- 9 whereby the sheath can be retracted from guidewire and further positioned
- 10 within the vasculature.
- 11 15. The apparatus of claim 14 wherein the sheath is deflectable.
- 12 16. The apparatus of claim 14 wherein the sheath is fixed-curve and torqueable.
- 13 17. The apparatus of claim 14 wherein the sheath is capable is capable of being
- 14 introduced into the coronary sinus.
- 15 18. The apparatus of claim 14 wherein the sheath includes electrodes at or near the distal
- 16 end for sensing pacing viability at potential pacing site.
- 17 19. The apparatus of claim 14 wherein the sheath includes an imaging catheter.
- 18 20. The apparatus of claim 14, further comprising means for introducing a pacing lead
- 19 into the patient.
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